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REMARKS

Claims 20-47 are pending in this application. Claim 20 is the sole independent claim.

Rejection Under 35 U.S.C. 103(a) - Claims 20-47

Claims 20-47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shapovalov et al. (U.S. Patent No. 6,563,080) in view of Freedenburg et al. (U.S. Patent No. 5,620,618). This rejection is hereby traversed for at least the following reasons.

In accordance with the present invention, a method is provided for manufacturing a medical device from a workpiece. The method begins by generating a beam of radiation from a radiation source. The radiation beam is directed onto the workpiece by scanning the radiation beam so that a prescribed pattern is cut in the workpiece.

As the Examiner notes, while Shapovalov cuts a desired pattern in a stent preform with a laser, Shapovalov also moves the preform while the laser remains stationary. That is, in Shapovalov, the pattern is not formed by scanning the radiation beam, as required by the claims of the present application.

Freedenburg relates to a method and apparatus for forming via holes in a multilayer ceramic (MLC) substrate for use in integrated circuits. Freedenburg uses a laser to form the holes instead of a mechanical punch, which can undesirably distort the via pattern (see col. 1, lines 46-50). The laser is scanned over the MLC substrate to form the desired pattern of vias.

Freedenburg is addressing the particular problems that arise with mechanical punching technology. As the patent states:

The mechanical punching technology currently used to manufacture MLC substrates has several limitations. The aspect ratio of a hole should theoretically be no less than one, that is the diameter should not be less than the thickness of the sheet to be punched. As the miniaturization of electronic devices continues, the requirement that smaller via holes be used increases. A certain minimum sheet thickness is necessary, however, for the mechanical integrity of the structure. (col. 1, lines 37-45)

Given the requirement for smaller and more closely spaced features in MLC substrates, a need exists for an

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apparatus and a method which use advanced technology to manufacture substrates with the required geometries. (col. 2, lines 19-22)

Thus, Freedenburg is using a scanning laser to address a very particular problem concerning the formation of vias in ceramic substrates for integrated circuits. While it arguably may have more broad applicability, nothing in Freedenburg suggests its use in the fabrication of a medical device, which is an entirely different endeavor.

Accordingly, even assuming *arguendo* that Shapovalov could be modified to incorporate the scanning system of Freedenburg, Applicants' respectfully submit that there is no motivation to form the proposed combination. As the Federal circuit has stated, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). In this case the Examiner has impermissibly used hindsight to simply conclude that a preform for a medical device can be cut into its desired shape using a scanning laser beam that is intended to form holes in a multilayer ceramic substrate for integrated circuits.

Accordingly, for at least the reasons presented above, the rejection of the claim 20 and the claims that depend therefrom under 35 U.S.C. 103 should be reconsidered and withdrawn.

In addition, Applicants believe that the dependent claims set forth a combination of features that are patentable over the cited references for reasons that are separate and independent from those presented above. For example, claim 25 sets forth that the radiation beam is scanned about a circumference of the tubular workpiece. The Examiner, pointing to FIG. 5 of Shapovalov, states that in Shapovalov the radiation beam impinges on the circumference of the tubular workpiece. While it is certainly true that in Shapovalov the radiation beam impinges on the workpiece circumference at a specific location, it is also certainly true that it does not scan about the circumference, as claimed in claim 25 and as shown in FIGs. 4 and 5 of the present application. Accordingly, for at least this additional reason dependent claim 25 is believed to be patentable.

As another example, dependent claim 32 sets forth that a conical mirror is disposed in the optical path between the scanning galvanometer and the workpiece.

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Claims 34 further recites that the workpiece is a tubular workpiece that passes through an aperture in the apex of the conical mirror. One example of this arrangement is shown in FIGs. 4 and 5 of the present application, in which conical mirror 112 has a hole through its apex for receiving tubular workpiece 102 therethrough. Shapovalov, nor any of the remaining references cited by the Examiner, show such a conical mirror as set forth in claims 32 and 34. Accordingly, for at least this additional reason dependent claims 32 and 34 are believed to be patentable.

Obviousness-Type Double Patenting Rejection - Claims 20, 22, 25-29, 38-40 and 44-47

Claims 20, 22, 25-29, 38-40 and 44-47 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 and 15-19 of U.S. Patent No. 6,696,667. Upon the indication of allowable subject matter, Applicants will file a terminal disclaimer to overcome the double patenting rejection.

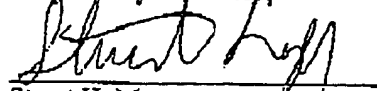
Conclusion

In view of the foregoing, it is believed that the application is now in condition for allowance, and early passage of this case to issue is respectfully requested. If the Examiner believes there are still unresolved issues, a telephone call to the undersigned would be welcomed.

Fees

If there are any fees due and owing in respect to this amendment, the Examiner is authorized to charge such fees to deposit account number 50-1047.

Respectfully submitted,



Stuart H. Mayer
Registration No. 35,277

Attorney for Applicants
Mayer & Williams PC
251 North Avenue West, 2nd Floor
Westfield, NJ 07090
(908) 518-7700 Tel.
(908) 518-7795 Fax